

REMARKS

This communication is in response to the nonfinal Office Action issued October 7, 2003. The Examiner rejected claims 10, 12, 13, 15, 16, and 44 under 35 U.S.C. § 102 in view of U.S. Patent No. 3,963,080 to Walker (Walker). The Examiner rejected claim 14 under 35 U.S.C. § 103 in view of Walker modified by U.S. Patent No. 4,192,551 to Weimer *et al.* (Weimer). The Examiner indicated that claims 1-3 and 41-43 were allowed.

Claim Rejections Under 35 U.S.C. § 102

On pages 2-3 of the Office Action, the Examiner rejected claims 10, 12, 13, 15, 16, and 44 under 35 U.S.C. § 102 in view of Walker.

It is well settled that for a rejection of a claim under 35 U.S.C. § 102 to be proper, each and every element as set forth in the claim must be found in a single reference. See, for example, MPEP § 2131. For at least the reasons stated below, the Examiner's rejection of claims 10, 12, 13, 15, 16, and 44 does not satisfy this burden.

Walker discloses a tunnel boring machine that consists essentially of four main assemblies: a main beam assembly (6), a gripper assembly (38), a cutterhead support assembly (14), and a cutterhead assembly (4). Steering of the cutterhead assembly is accomplished by steering shoes (51 and 58) mounted on opposite sides of the cutterhead support assembly and connected thereto by piston and cylinder assemblies (52 and 55). The horizontal attitude of the cutterhead support assembly is controlled by cylinders (31 and 75). The cylinder assemblies and cylinders are independent from the hydraulic rams (36 and 78) used for advancing the cutterhead support assembly. Where the tunnel does not have one or both full side walls, the horizontal cylinders (55, 62, 96, and 97) provide the steering in the

horizontal plane. In all circumstances, steering is accomplished by extenders (piston and cylinder assemblies 52 and 55) that are separate from the extenders (hydraulic rams 36 and 78) used for advancing the cutterhead assembly.

In contrast, the present invention utilizes only one set of (two) extenders for both advancing and steering. Independent claim 10 has been amended above to more clearly recite this. Thus, not all of the claim recitations are present in the cited reference, and the rejection of claims 10, 12, 13, 15, 16, and 44 is therefore improper and must be withdrawn.

In view of the foregoing, the Examiner's rejection under 35 U.S.C. § 102 to claims 10, 12, 13, 15, 16, and 44 is believed to be overcome.

Claim Rejections Under 35 U.S.C. § 103

On pages 3-4 of the Office Action, the Examiner rejected claim 14 under 35 U.S.C. § 103 in view of Walker modified by Weimer.

It is well settled that for a rejection of a claim under 35 U.S.C. § 103 to be proper, each and every recitation of the claim must be present in the cited reference(s). See, for example, MPEP § 2143.03. For at least the reasons stated below, the Examiner's rejection of claim 14 does not satisfy this burden.

Since independent claim 10 is allowable over the art of record, as discussed above, dependent claim 14 is also allowable for at least the same reasons. It is also noted that Weimer does not satisfy the deficiencies of Walker. Thus, not all of the claim recitations are present in the cited references, and the rejection of claim 14 is therefore improper and must be withdrawn.

In view of the foregoing, the Examiner's rejection under 35 U.S.C. § 103 to claim 14 is believed to be overcome.

Allowable Subject Matter

On page 4 of the Office Action, the Examiner indicated that claims 1-3 and 41-43 were allowable. The Applicant appreciates the Examiner's indication of allowable subject matter.

Additional Fees

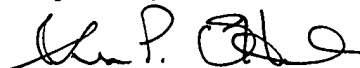
While no fee is believed due in conjunction with this Response, the Commissioner is hereby authorized to charge any insufficiency or credit any overpayment associated with this application to Swidler Berlin Shereff Friedman, LLP Deposit Account No. 19-5127 (order no. 18155.0006).

Conclusion

Claims 10, 12, 14-16, and 44 have been amended, claim 45 has been added, and claims 17-20, 23, and 26-40 have been canceled. Claims 1-3, 10, 12-16, and 41-45 are pending in the application, and are believed to be in condition for allowance. In view of the foregoing, all of the Examiner's rejections of the claims are believed to be overcome. The Applicant respectfully requests reconsideration and issuance of a Notice of Allowance for all

claims. Should the Examiner feel further communication would help prosecution, the Examiner is urged to call the undersigned at the telephone number provided below.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Sean P. O'Hanlon", with a stylized flourish at the end.

Sean P. O'Hanlon
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